

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (currently amended): An optical analysis chamber, comprising:

An optically transmissive elongate tubular body having an elongate tubular body wall including an interior surface and an exterior surface, said interior surface of said body wall defining an elongate separation chamber that is in direct contact with a sample material being analyzed;

Wherein said body wall further includes a first optically transmissive window, said window having a substantially convex exterior surface portion, through which optical radiation passes, said window having a non-uniform thickness about the separation chamber selected so as to optimize optical coupling therewith for analyzing said sample material.

Claim 2 (original): The optical analysis chamber of claim 1, wherein said first window further comprises a substantially curved interior surface portion.

Claim 3 (original): The optical analysis chamber of claim 2, wherein said tubular body is an electrophoresis capillary.

Claim 4 (original): The optical analysis chamber of claim 2, wherein said exterior surface of said first window defines an optical interrogation beam transmission surface having a substantially semi-cylindrical shape.

Claim 5 (previously presented): The optical analysis chamber of claim 2, wherein the longitudinal axis of said separation chamber is offset from the longitudinal axis of said tubular body.

Claim 6 (original): The optical analysis chamber of claim 2, wherein said exterior surface of said window defines an optical interrogation beam transmission surface having a substantially acylindrical shape.

Claim 7 (previously presented): The optical analysis chamber of claim 2, wherein incident optical radiation passing through said window is directed through said separation chamber and is brought substantially to focus at a location near said exterior surface of said tubular body beyond said separation chamber.

Claim 8 (previously presented): The optical analysis chamber of claim 2, wherein incident optical radiation passing through said window is directed through said separation chamber and is brought substantially to focus at a location near said interior surface of said tubular body beyond the center of said separation chamber.

Claim 9 (previously presented): The optical analysis chamber of claim 2, wherein incident optical radiation passing through said window is directed through said separation chamber and is brought substantially to focus at a location within said separation chamber.

Claim 10 (previously presented): The optical analysis chamber of claim 2, wherein incident optical radiation passing through said window is directed through said separation chamber and is brought substantially to focus at a location near said interior surface of said tubular body before the center of said separation chamber.

Claim 11 (previously presented): The optical analysis chamber of claim 2, wherein incident optical radiation passing through said window is directed to substantially focus about the center of said separation chamber.

Claim 12 (previously presented): The optical analysis chamber of claim 2, wherein a portion of said exterior surface includes a reflective coating so as to redirect optical radiation towards said separation chamber.

Claim 13 (original): The optical analysis chamber of claim 2, wherein a portion of said exterior surface of said tubular body is formed to be substantially curved.

Claim 14 (original): The optical analysis chamber of claim 2, wherein said exterior surface of said tubular body further includes at least one facet for cooperatively aligning adjacent said optical analysis chambers within an array of said optical analysis chambers.

Claim 15 (original): The optical analysis chamber of claim 2, wherein said exterior surface of said tubular body further includes a pair of opposed planar facets for cooperatively aligning adjacent said optical analysis chambers within an array of said optical analysis chambers.

Claim 16 (previously presented): The optical analysis chamber of claim 1, wherein said body wall further includes a portion functioning as a second window selected to optimize optical coupling of information-carrying radiation out of said separation chamber.

Claim 17 (original): The optical analysis chamber of claim 16, wherein said first window is distinct from said second window.

Claim 18 (original): The optical analysis chamber of claim 16, wherein said first window is substantially orthogonally oriented with said second window.

Claim 19 (original): The optical analysis chamber of claim 2, wherein the cross-section of said tubular body is bilaterally symmetric.

Claim 20 (original): The optical analysis chamber of claim 2, wherein the cross-section of the external surface of said tubular body has no axis of symmetry.

Claim 21 (original): The optical analysis chamber of claim 17, wherein said tubular body wall further comprises a third window selected to optimally couple radiation therethrough.

Claims 22-38 (cancelled)